



METRO 4700 ST-USB



USER' S MANUAL

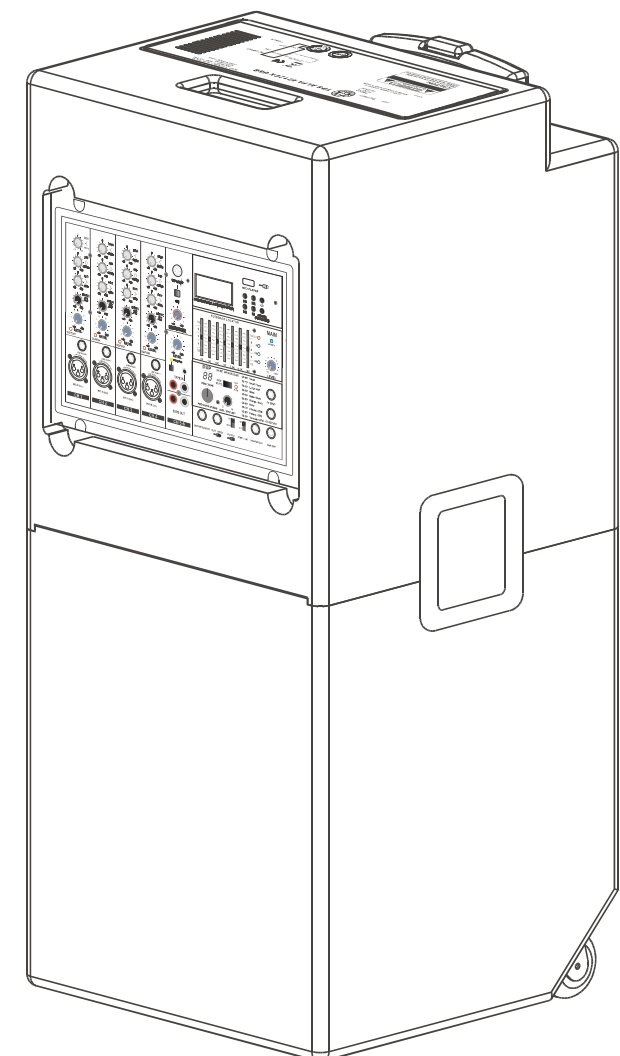
***ALL-IN-ONE PORTABLE POWERED
SPEAKER SYSTEM
METRO 4700 ST-USB***



TOPP PRO MUSIC GEAR

www.topppro.com

METRO4700ST-USB



Important Safety Instructions



This symbol, wherever used, alerts you to the presence of un-insulated and dangerous voltages within the product enclosure. These are voltages that may be sufficient to constitute the risk of electric shock or death.



This symbol, wherever used, alerts you to important operating and maintenance instructions.

Please read.



Protective Ground Terminal



AC mains (Alternating Current)



AC mains (Alternating Current)

ON:

Denotes the product is turned on.

OFF:

Denotes the product is turned off.

WARNING

Describes precautions that should be observed to prevent the possibility of death or injury to the user.



CAUTION

Describes precautions that should be observed to prevent damage to the product. Disposing of this product should not be placed in municipal waste but rather in a separate collection.

WARNING

Power Supply

Ensure that them a inssource voltage (AC outlet) matches the voltage rating of the product. Failure to do so could result in damage to the product and possibly the user. Unplug the product before electrical storms occur and when unused for long periods of time to reduce the risk of electric shock or fire.

External Connection

Always use proper ready-made insulated mains cabling (power cord). Failure to do so could result in shock/death or fire. If in doubt, seek advice from a registered electrician.

Do Not Remove Any Covers

Within the product are areas where high voltages may present. To reduce the risk of electric shock do not remove any covers unless the AC mains power cord is removed. Covers should be removed by qualified service personnel only.

No user serviceable parts inside.

Fuse

To prevent fire and damage to the product, use only the recommended fuse type as indicated in this manual. Do not short-circuit the fuse holder. Before replacing the fuse, make sure that the product is OFF and disconnected from the AC outlet.

Protective Ground

Before turning the unit ON, make sure that it is connected to Ground. This is to prevent the risk of electric shock.

Never cut internal or external Ground wires. Like wise, never remove Ground wiring from the Protective Ground Terminal.

Operating Conditions

Always install in accordance with the manufacturer's instructions.

To avoid the risk of electric shock and damage, do not subject this product to any liquid/rain or moisture.

Do not use this product when in close proximity to water.

Do not install this product near any direct heat source.

Do not block areas of ventilation. Failure to do so could result in fire.

Keep product away from naked flames.

IMPORTANT SAFETY INSTRUCTIONS

Read these instructions

Follow all instructions

Keep these instructions. Do not discard.

Heed all warnings.

Only use attachments/ accessories specified by the manufacturer.

Power Cord and Plug

Do not tamper with the power cord or plug. These are designed for your safety.

Do not remove Ground connections!

If the plug does not fit your AC out let seek advice from a qualified electrician.

Protect the power cord and plug from any physical stress to avoid risk of electric shock.

Do not place heavy objects on the power cord. This could cause electric shock or fire.

Cleaning

When required, either blow off dust from the product or use a dry cloth.

Do not use any solvents such as Benzol or Alcohol.

For safety, keep product clean and free from dust.

Servicing

Refer all servicing to qualified service personnel only.

Do not perform any servicing other than those instructions contained within the User's Manual.

PORTABLE CART WARNING



Carts and stands - The component should be used only with a cart or stand that is recommended by the manufacturer. A component and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the component and cart combination to overturn.

GUARANTEE

Topp Pro guaran tees the normal operation of the product against any defect of manufacture and/or vice of material, by the term of (12) months, counted as of the date of purchase on the part of the user, committing itself to repair or to change, to its election, without position some, any piece or component that will fail in normal conditions of use within the mentioned period.

This guarantee is valid if the original buyer will have to present /display this certificate properly sealed and signed by the selling house, accompanied by the corresponding invoice of purchase where it consisted the model and serial number of the acquired equipment.

The guarantee does not cover:

- Damages caused by the illegal use of the product, repair and / or nonauthorized modification conducted by people by Topp Pro.
- Damages caused by the connection of the equipment to other equipment different from t he specified ones in the manual of use, or by bad connection to these last ones.
- Damages caused by electrical storms, blows and / or incorrect transport.
- Damages caused by excesses or falls of tension in the network or by connection to networks with a tension different from the required one by the unit.
- Damages caused by the presence of sand, acid of batteries, water, or any strange elem ent inside the equipment.
- Deteriorations produced by the course of the time, use and/or normal wear of the unit.
- Alteraion or absence of the serial number of factory of the equipment.

The repairs could only be carried out the authorized technical service by Topp Pro, that will inform about the term and other details into the repairs to take place according to this guarantee.

Topp pro, will repair this unit in counted a term nongreater to 30 days as of the date of entrance of the unit to the Technical Service. In those cases in that due to the particularity of the spare part, outside necessary their import, the repair time and the viability of the same one will be subject to the effective norms for the import of parts, in which case one will inquire to the user about the term and possibility into repair.

With the object of its correct operation, and of the validity of this one guarantee, this product will have to be installed and to be used according to the instructions that are detailed in the manual associate or the package of the product.

This unit will be able to appear for its repair, next to the invoice of purchase (or any other comprobante where the date of purchase consists), to its authorized distributor Topp Pro or an authorized technical center on watch by Topp Pro.

Exclusion of damages:

THE RESPONSIBILITY OF TOPP PRO BY ANY DEFECTIVE PRODUCT IS LIMITED THE REPAIR OR THE REPLACEMENT OF HE HIMSELF, TO TOPP OPTION PRO. IF WE CHOSE TO REPLACE THE PRODUCT, THE REPLACEMENT CAN BE A RECONDITIONATED UNIT. TOPP PRO WILL NOT BE RESPONSIBLE BY THE DAMAGES BASED ON THE LOST, INCONVENIENCE, LOSS OF USE, BENEFITS, LOST SAVINGS, BY THE DAMAGE TO OTHER EQUIPMENT OR OTHER ARTICLES IN THE USE SITE, OR BY ANY OTHER DAMAGE IF HE IS FORTUITOUS, CONSEQUENT OR OF ANOTHER TYPE, ALTHOUGH TOPP PRO HAS BEEN NOTICED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow to exclusion or the limitation to the fortuitous or consequent damages, so the aforesaid limitation can not be applied to you.

This guarantee gives specific legal rights him, you can also have other right that varies of state to state.

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TECHNICAL SPECIFICATION

Type	2-way coaxial vented powered speaker	
System section	Input type	XLR/RCA/3.5mm jack Mp3 , CD/6.3mmjack
	Input impedance	Line 47k Ohms-input/Mic 1k Ohms-input
	Display LEDs	Power on/Clip
	External controls	Volume/compressor SW/phantom power SW
Input channels	Mic input	Electrically balanced, discrete input
	Frequency response	20Hz-20KHz, +/-1dB
	Gain	55dB
	SNR	>75dB
	Line input	Electrically balanced
	Frequency response	20Hz-20KHz, +/-1dB
	Gain	25dB
Impedance	Mic input	1.5k Ohm
	All other input	10k Ohm or greater
	Tape out	1k Ohm
	All other output	120 Ohm
THD	<0.03%	
Channel equalization	Hi shelving	+/-15dB@10KHz
	Low shelving	+/-15dB@100Hz
Master equalization (7-band EQ)	+/-15dB@63Hz	
	+/-15dB@160Hz	
	+/-15dB@400Hz	
	+/-15dB@1KHz	
	+/-15dB@2.5KHz	
	+/-15dB@6.3KHz	
	+/-15dB@16KHz	
DSP section	A/D & D/A converters	24-bit
	DSP resolution	24-bit
	Type of Effects	Echo, Echo+Verb, Tremolo, Plate, Chorus, Vocal, Rotary, Small Room, Flange+Verb & Large Hall
	Preset	100
	Controls	100-position PRESET selector /Clip LED /Mute Switch with LED indicator

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Don't forget to visit our website at www.toppopro.com for more information about this and other **Topp Pro** products.

1 INTRODUCTION

Thank you for purchasing the METRO 4700 ST-USB powered speaker system. This Unique system was designed to be an all-in-one portable solution with a built-in 250W amplifier, 6 channels mixer with EQ and 24-Bit DSP effects.

The METRO 4700 ST-USB combines practicality with top design concepts achieved over many years of manufacturing quality products. Please read this manual carefully so you can take advantages of all the features of the METRO 4700 ST-USB.

Thank you again for making th right choice in purchasing the METRO 4700 ST-USB.

2 FEATURES

- *Portable MDF painted cabinet with wheel
- *2-way coaxial vented powered speaker
- *2*12" woofer and 2*1" throat ferrite driver
- *6-CH stereo mixer with a total of 6 inputs, balanced XLR and TRS inputs
- *7-band graphic EQ
- *ultra low noise discrete mix pre-amps with +15V phantom power
- *2-band EQ on stereo input channels
- *independent level controls on each channel
- *high headroom for excellent dynamic range
- *on-stage monitor mix
- *FX send for built-in or external effects
- *Tape in/out/USB player
- *24-bit DSP effects with 100 presets
- *lamp socket
- *mini plug input for portable players with level control

3 USEFUL DATA

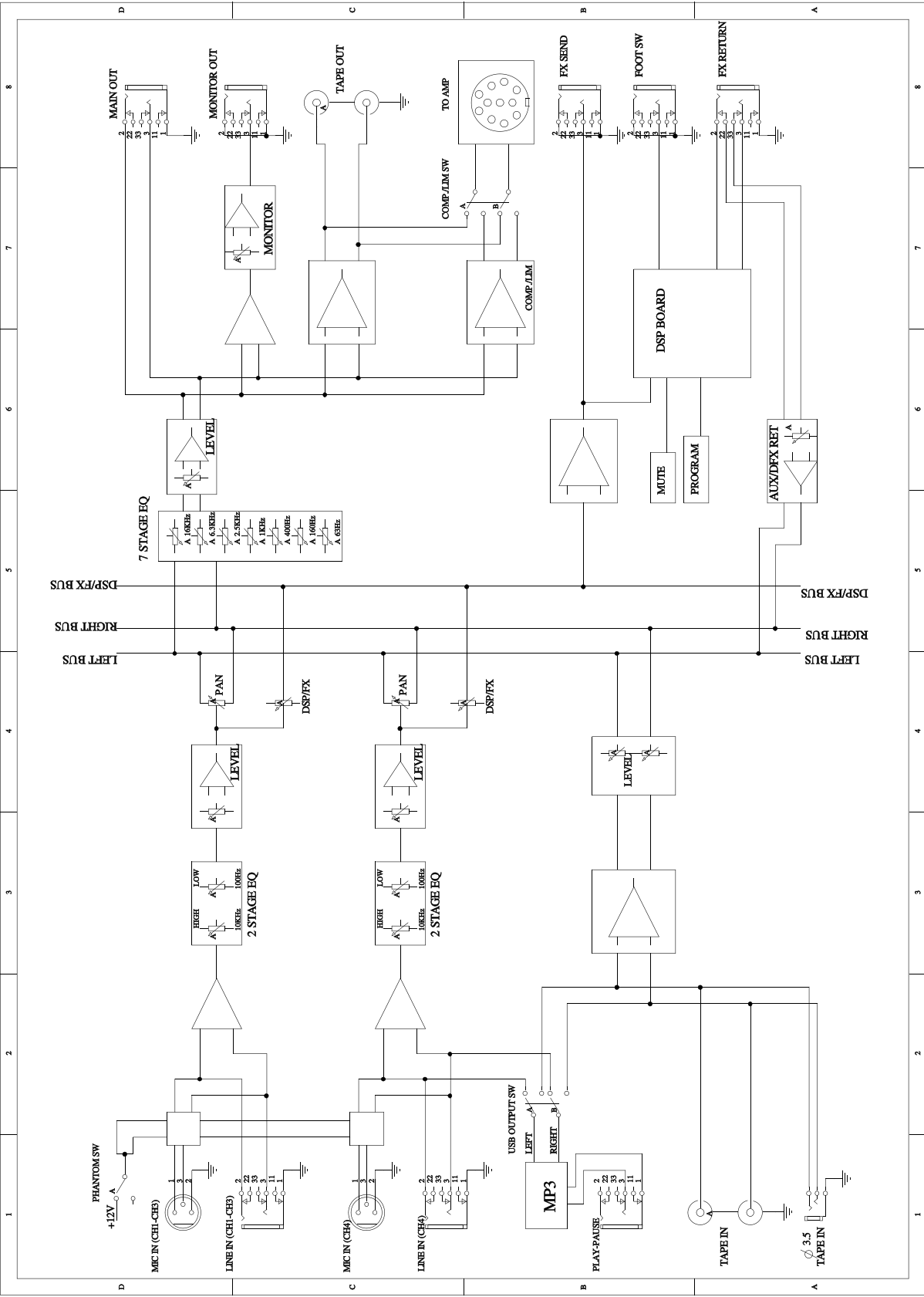
Please write your serial number here for future reference.

Serial Number:

Data of Purchase:

Purchased at:

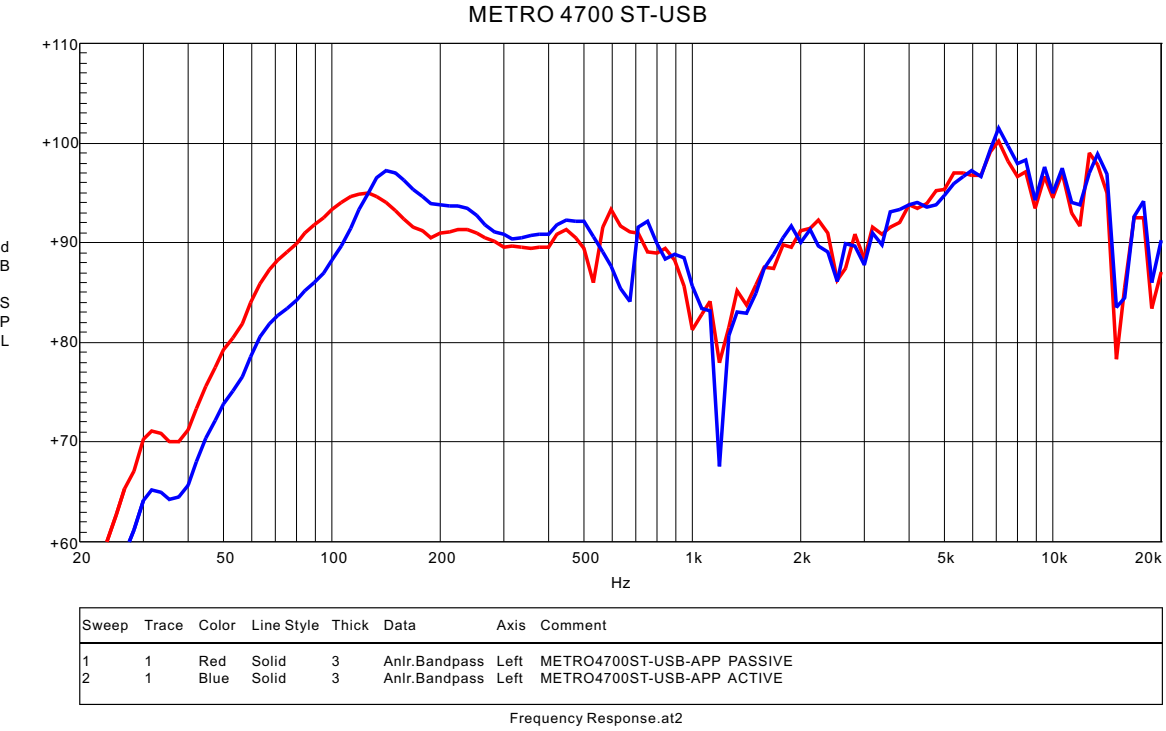
BLOCK DIAGRAM



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PRESETS & FREQUENCY RESPONSE CURVE

No	Preset	Description	Parameter
00~09	Vocal	Simulate a smallspace with slight decaytime.	Rev. Decay time: 0.8~0.9S pre-delay:0-45ms
10~19	Small room	Simulate a brightstudio room	Decay time: 0.7~2.1S pre-delay:20-45ms
20~29	Large hall	Simulate a largeacoustic space of thesound	Decay time: 3.6~5.4S pre-delay:23-55ms
30~39	Echo	Reproduce the sound in input on theoutput after a lapse oftime or delay	Delay time: 145~205mS
40~49	Echo+verb	Echo with roomeffect	Delay time: 208~650ms Delay time: 1.7-2.1s
50~59	Flange +verb	Simulate to playwith another person carrying outsame the notes on thesame instrument and reverb	Delay time: 1.5-2.9ms rate: 0.8Hz~2.52Hz
60~69	Plate	Simulate the transducersound like classic brightvocal plate	Decay time:0.9-3..6s
70~79	Chorus+GTR	Recreate the illusion of more than on instrument from a singlesound.	Rate: 0.92Hz~1.72Hz
80~89	Rotary +GTR	Simulate sound effect achieved by rotatinghorn speakers and a bass cylinder.	Modulation depth: 20%-80%
90~99	Tremolo +GTR	amplitude modulation of the signal	rate: 0.6Hz~5Hz



HOOKUP DIAGRAM

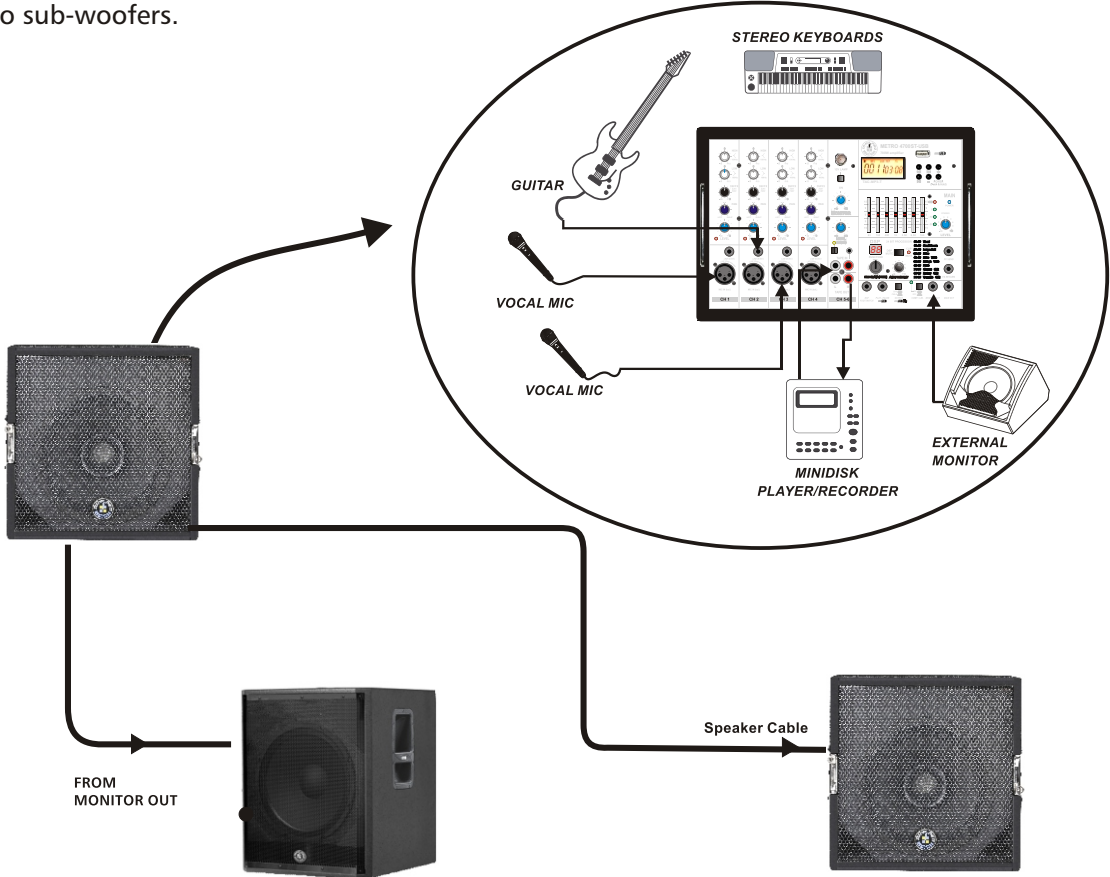
- Matching with passive speaker
- Make all initial connection with all the equipment powered off, and make sure that the main volume controls are turned down completely.
- 1) with a high quality signal line connect a CD player or other players to the active speaker METRO 4700 ST-USB.
 - 2)using the speaker cable connect th e INPUT of the unit to its OUTPUT.
 - 3)complete other connections as illustrated.
- And then turn th e power on.
- 4)turn up the volume controls of the unit to about 70%.
 - 5)use the mixer PFL function of the unit to get the proper input level, and adjust the Main Mix Level control to manipulate output level.



When put Mixer on the bracket to adjust the volume, you can insert the connector into the TO MIX jack, this unit can work on the normal condition.

Matching with passive speaker

in this example, it connects a sub-woofer, and the woofer of this two full-range act like mid-woofer. This is very popular combination especially in small size clubs where there is no need for two sub-woofers.



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CONTROL ELEMENTS

MIXER SECTION

1- STEREO INPUT CHANNELS

Ch1 through Ch4, come with balanced MIC IN & LINE IN connectors. Use the XLR (MIC IN) socket to connect a low impedance microphone or low level signal, which also features +15V phantom power allowing you to connect a condenser microphone. Use the 1/4" TRS (LINE IN) jack to connect either a microphone or a line level instrument such as synthesizers, drum machines, effect processors or any other line level signal.

Note: you shall never connect an unbalanced microphone to XLR socket if you do not want to damage both the microphone or the unit.

2- +15V phantom power

This switch will apply +15 volt phantom power only to the 4 XLR input sockets. When these XLR sockets are connected with devices that do not require phantom power, please make sure the phantom power is turned off, otherwise, this may damage the device and monitor.

3- Channel level control

This control is used to adjust the overall level of volume for respective channel. The adjustable range goes from -∞ to +10dB.

4- DSP/FX AUX1 POST CONTROL

This control is configured as a post-fader, so the audio signal will be affected by the channel level control. Via the FX SEND socket, the AUX1 signal can be sent to an external effect device.

EQUALIZER

METRO 4700 ST-USB features a 2-band equalizer with allows you to adjust the high, mid and low frequencies separately on each mono channel.

5- HIGH

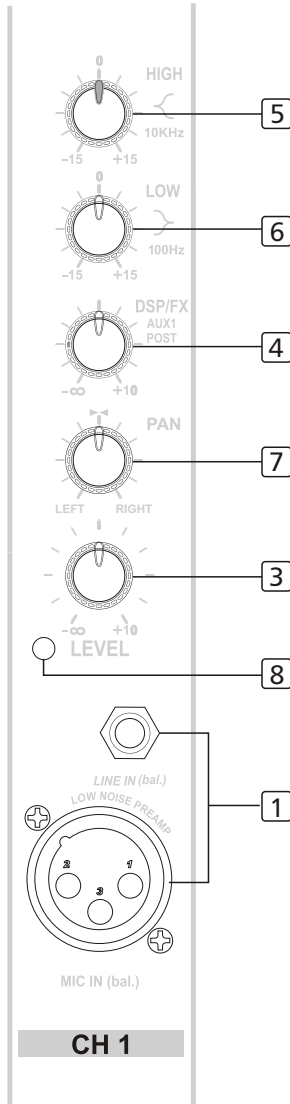
this is the treble control. You can use it to get rid of high frequency noises or to boost the sound of cymbals or the high harmonics of the human voice. The gain range goes from -15dB to +15dB with a center frequency of 12kHz.

6- LOW

this is the bass control. It is used to boost male voice or kick-drum and bass guitar. Your system will sound much bigger than what it is. The gain range goes from -15dB to +15dB with center frequency of 80Hz.

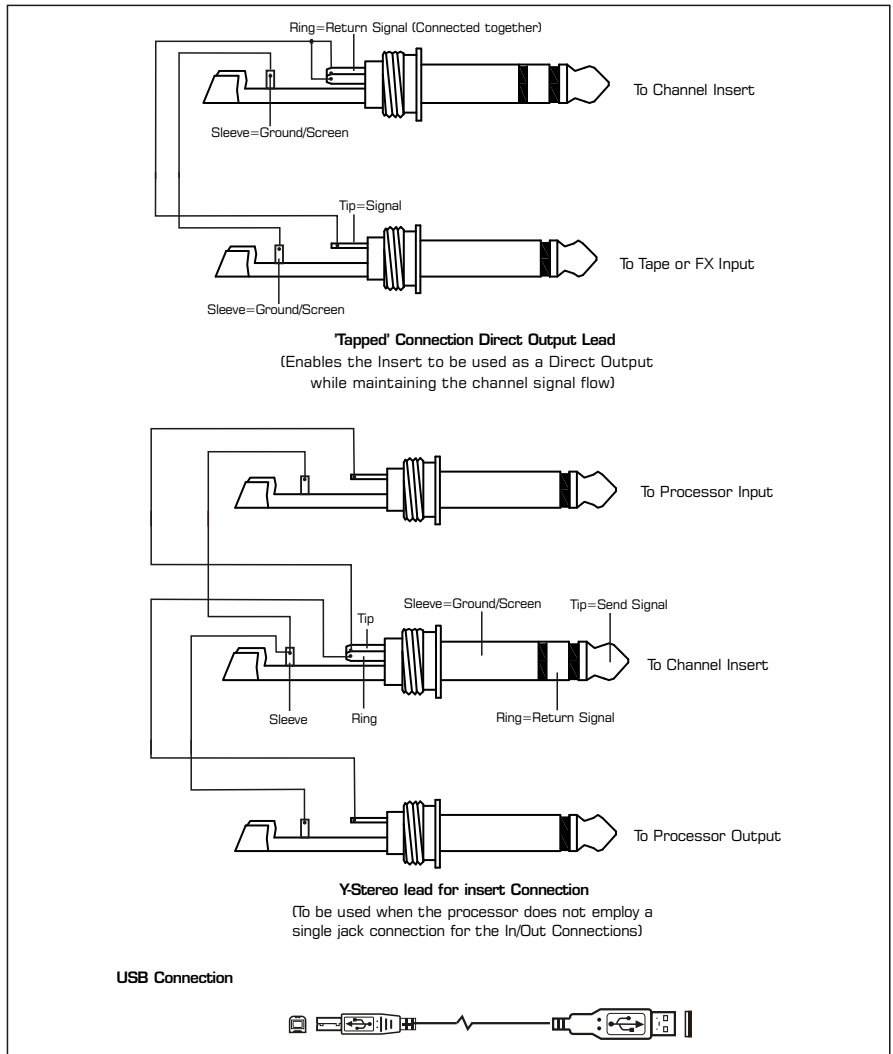
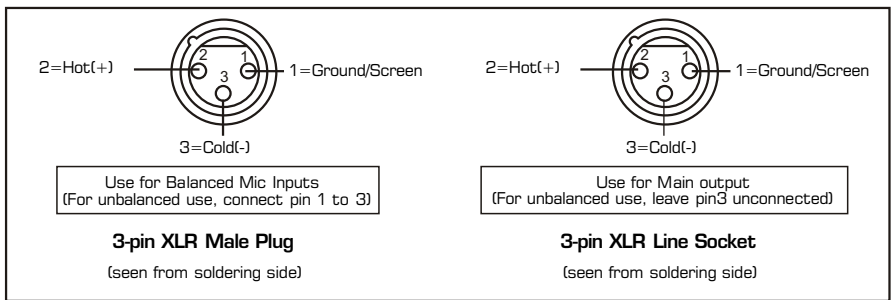
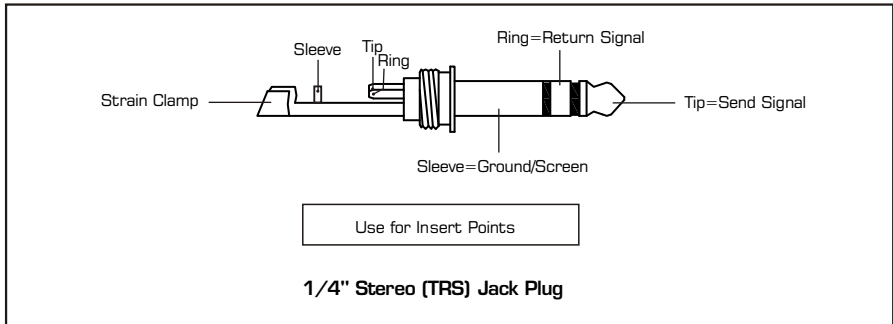
7- Pan control

abbreviation of PANORAMA control for mono and stereo channels. It is used to determine the amount of channel signal sent to main mix left and right outputs. Keeping this control in center position, the signal will be positioned in middle of "stereo field". Turn this control fully counterclockwise, the signal will be present only on the left of main mix and vice-versa.



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INSTALLATION AND CONNECTIONS



4

CONTROL ELEMENTS

USB-MP3 PLAYER SECTION

The file system of USB memory for USB-MP 3 player is FAT16 and FAT 32. The player can only decode MP 3. It can have 7 rank subordinate folders at most, and the maximum quantity of folders within mp3 files is 24. In the whole USB memory, the total folders can not exceed 256 (including those folders without mp3 songs).

38- USB PORT

For connecting with USB memory.

39- PRE

In pause state, press this button it will go to the previous song and keep in pause state. In play state, press this button, it will go to the previous song and start playing.

40- NEXT

In pause state, press this button it will go to the next song and keep in pause state. In play state, press this button, it will go to the next song and start playing.

41- REPEAT

Press this button the player will change between the following four modes. REP ALL means repeat all songs in the memory, the mark on the screen is . .REP1 means to repeat one song, the mark on the screen is . Play in order means to play the songs according to the order, the mark on the screen is blank. Random play means to play the songs at random, the mark on the screen is A.

42- PLAY/PAUSE

in play state, press this button to pause the player. In pause state, press this button to start playing.

43- STOP

in play state, press stop button to stop playing and the whole quantity of MP 3 songs in the USB memory will display on the screen. In stop state, press the PRE/NEXT button or press the stop button again to go to the first song and the player will keep in pause state, then press down the PLATY/PAUSE button to play it.

44- POWER

When the unit is off, press this button & hold for about 2 or 3 seconds to turn on the power supply of the player. Repeat the above operation, you can turn off the power supply of the player.

Note: basic interface instruction

When the player isn't connected to a USB memory equipment, the interface is as follows:



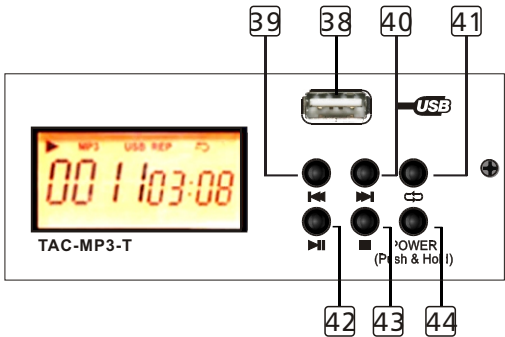
When the player is searching for MP 3 songs, the interface is as follows.



When the player is in pause state, the interface is as follows:



When the player is in use, the interface is as follows:



CONTROL ELEMENTS

8- PEAK/SIGNAL LED

This LED will illuminate green when a signal is present at the LINE/MIC input. When the signal nears clipping, the LED will illuminate red.

9- Level control

This control is used to adjust the level of TAPE IN and 3.5mm jack signal simultaneously adjustable range goes from - ∞ to +10dB.

10- 3.5mm jack

This insert can be used to connect with a computer, mp3, mo4 or CD player.

11- TAPE IN

The METRO 4700 ST-SUB features dual RCA jacks(L & R). If you wish to listen to your monitor from a tape recorder, DAT, or cassette, please use these tape input jacks.

12- TAPE OUT

via these jacks, you can route the main out signal into a tape recorder or DAT recording.

13- MONITOR CONTROL

This control is used to adjust the level of monitor output.

14- LAMP SWITCH

by pressing this key, you can turn the lamp on/off.

15- 12V LAMP

A BNC-type lamp socket is provided for use with a goose-neck lamp.

16- GRAPHIC EQ

METRO 4700 ST-USB is equipped with a graphic EQ, which provides 7-band fader controls. Via these faders, you can boost or attenuate the selected frequency by 15dB at a preset bandwidth. When all faders are at the center position, the output of the equalizer is at the flat response. They are used to modify the frequency "contour" of a sound. The EQ function will be activated automatically as soon as you operate this unit.

The automatic feedback locator function will be activated in main mix signal path. When a frequency band fader lights up, it means the level of this **Esto hay que eliminarlo** which may result in unpleasant speaker howling or whistling. In this case, in order to eliminate feedback, you need to turn down the corresponding fader.

17- LEVEL CONTROL (IN graphic EQ SECTION)

This control is used to adjust the output level. The adjustable range goes from - ∞ to +10dB.

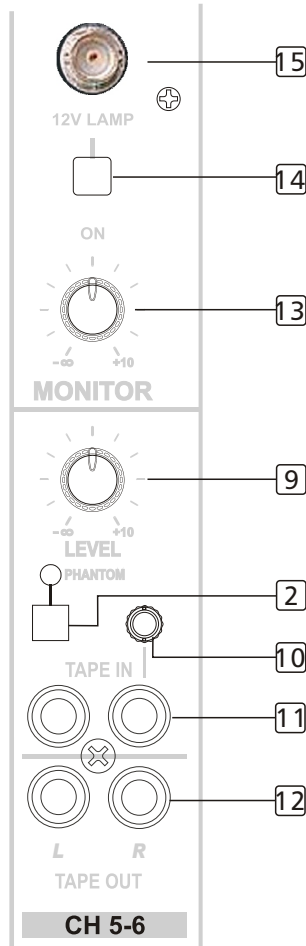
18- OUTPUT LEVEL LED

The 4-segment LED meter is used to indicate the output level.

19- POWER LD

This LED lights up when the unit is powered on.

4



4

CONTROL ELEMENTS

20- MAIN OUT

This jack is used to output the main mix signal to an external unit.

21- MONITOR OUT

This jack is used to connect input signal of an external monitor amplifier or active monitor speaker.

22- COMP/LIM SWITCH

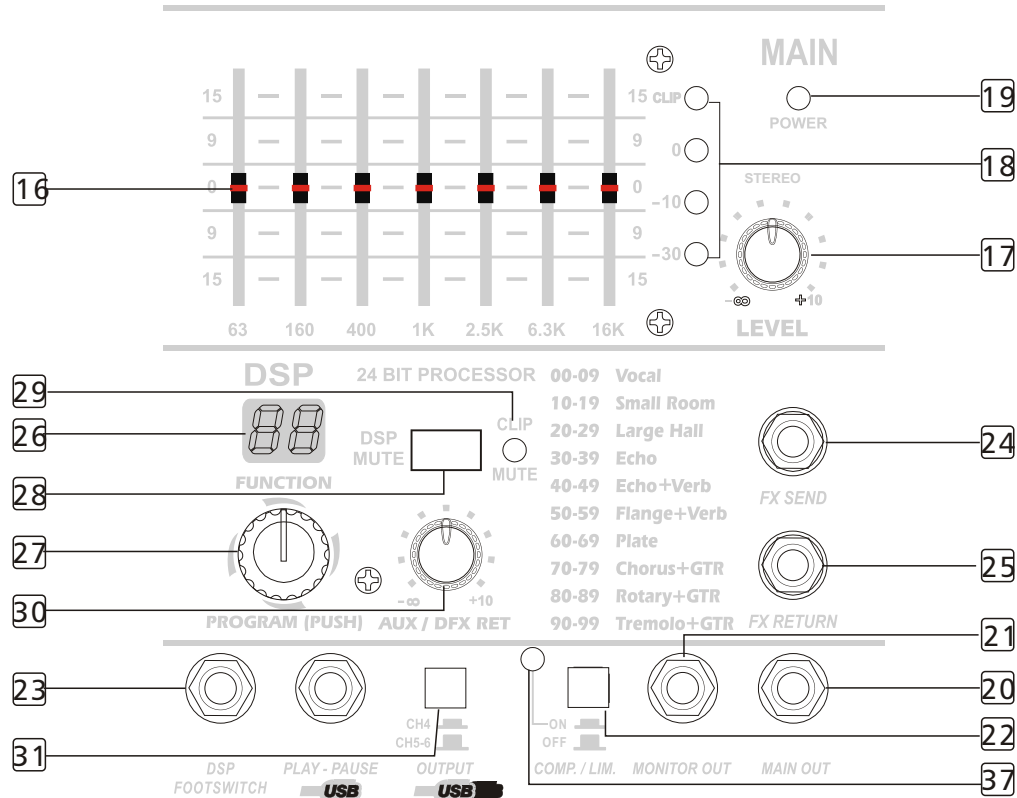
set this switch to "ON" position in order to prevent your signal from exceeding a level threshold that would cause distortion. This switch is user defeatable and can be in the "ON" or "OFF" position depending on your preference.

23- FOOT SWITCH

you can connect an external footswitch to turn the onboard effect module on/off, via the 1/4" phone jack.

24- FX SEND jack

this jack is used to send out the signal from AUX bus.



25- FX RETURN jack

This jack is used to return the sound of an effect unit to the main mix. You can also use it as an extra auxiliary input.

DSP SECTION WITH 24-BIT DIGITAL EFFECTS

Your unit features a special 100-preset digital effect, for further details please refer to the following content.

26- DISPLAY

Displays the selected preset.

4

CONTROL ELEMENTS

27- PROGRAM(PUSH)

Adjust this knob to select the right effect you wish to perform. There are total 100 options for you: vocal, echo, plate and versatile two-effect combination. When you are satisfied with the chosen preset, please push this knob to store this preset.

28- DSP MUTE BUTTON

This button is used to activate/deactivate the effect facility. Sometimes, you can also use the FOOT SWITCH jack for convenient operation.

29- CLIP/MUTE LED

This LED lights up when the input signal is too strong. In case of the digital effect module being muted, this LED also lights up.

30- AUX/DFX RET CONTROL

This control is used to adjust the volume of FX RETURN and MAIN OUTPUT effect.

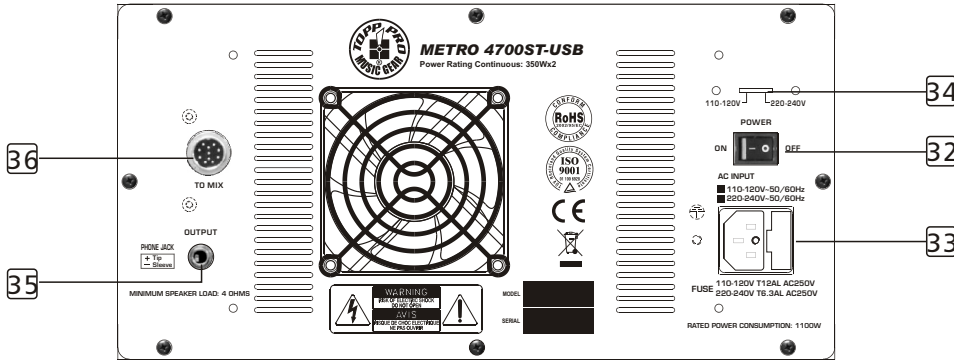
31- USB OUTPUT

With this switch, the signal of USB can be selected to input in to CH 4 or TO CH 5-6.

REAR PANEL

32- POWER ON/OFF SWITCH

switched the main unit power on or off.



33- AC INPUT

Standard, IEC receptacle connect your unit to main electrical outlet with the supplied power cord.

34- VOLTAGE SELECTOR

There are two kinds of voltages for your operation from this switch you can select the voltage at 115V or 230V.

35- PHONE JACK

These jacks are used to connect METRO 4700 ST-USB passive speakers.

Note: in order to avoid damaging your built-in amplifier, please pay more attention to the impedance of speaker. Lower load impedances are not permitted.

36- TO MIX

Put the Mixer on the bracket to adjust the volume, you can insert the connector into the To MIX jack, and the unit can work on normal condition.

37- LIMIT LED

When the output signal distortion exceeds 0.5%, then the red LED (LIMIT) indicator will blink. It will warn you that the levels of the input signal are too high and may cause distortion. Please attenuate the level of the input level.